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ABSTRACT

A multimodal career education model entitled BEST IDEA was field tested as an approach to the problem of retaining skilled nurses in the work force. Using multimodal assessment and intervention strategies derived from the multimodal behavior therapy of Arnold Lazarus, researchers developed an individualized career development assessment and counseling program for use with student nurses. To test the program, researchers offered a two-semester-hour applied psychology course that was designed to serve as an entire unit of multimodal career education to 17 freshmen entering the career ladder nursing program at Odessa College in Texas in the spring of 1981. Addressed during the course were the following modalities: behavior, emotion, self-talk, thought, interpersonal relationships, developmental level, economic and societal factors, and alpha factors (those which affect physiological functioning, such as drug or alcohol abuse). Nine of the initial 17 students completed the program, causing the researchers to conclude that many students changed perceptions about careers in nursing. Participation in the program was associated with gains in assertiveness, sex role flexibility, personal adjustment, and career commitment. Based on the field test, researchers recommended a number of group and individual activities for use in any career development program. (MN)

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Multimodal Career Education for Nursing Students

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Abstract

Retaining students in training programs and nurses in the work force is a current critical problem that is related to inadequate career development among nursing students. Multimodal career education (BEST IDEA), an adaptation of Lazarus' (1976) broad-spectrum behavior therapy (BASIC ID), is presented as a tool for career assessment and intervention. A trial of a multimodal career education program was conducted by means of a Developmental Research and Utilization strategy (Thomas, Note 1). The results of the trial and promising applications of the BEST IDEA are described.

Introduction

Multimodal career education is an instructional design model that is proposed as an approach to alleviating the shortage of nurses through systematic career development intervention. Multimodal career assessment and intervention should be implemented early in the education of nursing students in order to promote realism in career choice, readiness for clinical training, commitment to career growth, and understanding of career as lifelong learning and personal development. Multimodal career education was implemented in the career ladder curriculum of a community college nursing program as a state-funded, occupational research project (Southern, Topper, Raley, & Walton, 1981). The project was guided by a Developmental Research and Utilization (DRU) strategy, first proposed by Thomas (Note 1), and produced some promising results. The integrative and comprehensive approach manifested in multimodal career education make the model compatible with professional nursing education at undergraduate, graduate, and continuing education levels.

Current health workforce studies (e.g., Center for Research, 1980; Coordinating Board, 1980; Texas Nursing Association, 1981; U.S. Department of Labor, 1980) indicate that demand for skilled nursing personnel exceeds supply in Texas and most areas of the country. In the hospital setting, demand for nurses is so critical that "bounties" and inducements are offered through conferences and placement services in order to recruit staff (Haddad, Note 2). Employment of graduates of foreign nursing schools and "par -time" nurses, who are often employed by temporary staffing agencies, is an increasingly common response to the shortage.

Although sufficiently large numbers of nurses may be graduated, major factors in the imbalance between supply and demand are the rapid turnover and dramatic attrition rates among skilled nurses (LaRochelle, Note 3). Some nursing students leave training programs due to inaccurate assumptions regarding the clinical side of nursing (Adams, Note 4). For example, individuals may enter nursing based upon sincere desires to help people; however, communicating with terminally ill patients and their families, working demanding shifts, and treating patients with bleeding wounds, present potentially aversive realities for unprepared students. "Reality shock" in the neophyte nurse is also manifested in the incongruency of ideals and roles, taught in school, and the values and expectations, manifested in the work setting (Schmalenberg & Kramer, 1979). Path to Biculturalism (Kramer & Schmalenberg, 1977) seminars have proven valuable in addressing the retention problem by reducing nurse-organization conflict, and enhancing individual coping and self-esteem.

Other factors in the attrition of nursing students and new graduates are deficiencies in interpersonal and decision-making skills. Most nursing education is oriented toward the development of technical and administrative competencies. Some educators assume that nursing students will develop human relations and career decision-making skills when they enter the work setting, while some employers assume that graduates will present the skills upon completion of technical training (Southern, Topper, Raley, & Walton, 1981). Yet, deficits in assertiveness, time and stress management, applied psychology, communication, and change agent skills, are often associated with job dissatisfaction and abandonment of career goals (Davis, 1977; Grissum & Spengler, 1976; Herman,

1977; Holt, 1977). Acceptance of the traditional roles of women and failure to develop androgynous behaviors can lead to unsatisfactory relationships with supervisors, physicians, allied health co-workers, and hospital administrators (Herman, 1977). Female nurses may also act upon assumptions--based on sex bias and sex role stereotyping--which restrict their career development and impose obstacles to career commitment (Hall, 1977; Holt, 1977; Hutchens & Colburn, 1979).

The problem of retaining nurses in the workforce is a function of personal and environmental factors which vary among individuals, training programs, and work settings. Career education, since its inception, has taken an appropriate multifaceted perspective, which holds promise for solving the nurse shortage. Career education--a process-oriented, "learning how to learn" approach to lifelong development (Bailey, 1977) --has emphasized systematic learning experiences that link the interests and abilities of the individual student with the demands and trends in the world of work (Herr & Kramer, 1976). By focusing upon personal and environmental factors education is an individuation process that also meets the needs of the community. In nursing, career education programs should focus upon examining personal assumptions regarding clinical training, professionalism, and advancement, as well as, investigating environmental characteristics of hospitals, work settings, and health care service delivery teams.

In recent years, counseling and therapy have focused more upon the person interacting with various natural environments. The cognitive-learning trend in psychotherapy (Mahoney, 1977) is one example of the concern for integrating personal and environmental factors in a treat-

ment perspective. Herr (1982) in a survey of comprehensive career guidance in the future, noted that interventions in career behavior should address the multidimensional and cognitive restructuring perspectives extant in the works of Lazarus (1976), Mahoney (1977), Meichenbaum (1977), and others. Multimodal career education for nursing students was conceived within such a framework, building upon the interactional perspective and broad spectrum of the "multimodal behavior therapy" of Arnold Lazarus.

Multimodal Behavior Therapy

Multimodal behavior therapy (Lazarus, 1973, 1976) is guided by the acronym, "BASIC ID." Seven areas of human functioning, or modalities, are designated by "BASIC ID:" Behavior, Affect, Sensation, Imagery, Cognition, Interpersonal Relations, and Drugs. The "Drugs" modality was later modified to include a variety of physical factors which seriously affect functioning--e.g., diet and exercise (Gerler, 1979; Lazarus, 1976). Two basic tenets of multimodal behavior therapy suggested its potential value as a model for career counseling.

The major appeal of the BASIC ID for career counseling is its comprehensive focus as an assessment device. The model requires the counselor to examine seven major modalities in determining strengths and problems of clients. The second tenet of the multimodal approach is an injunction not to "muddle" or aimlessly concentrate upon only one facet of human behavior. Rather, the counselor should address concerns in as many modalities as possible, thus increasing the likelihood of maintenance and generalization of treatment gains (Lazarus, 1976).

Keat (1978) referred to the "multimodal evolution" in counseling and guidance. According to Keat (1978, p. 12), the BASIC ID represents a ".

". . .new way of conducting effective counseling. . .by first identifying problems and then utilizing effective intervention strategies in order to ameliorate the client's condition." Keat's adaptation of the multimodal approach is specifically directed at elementary school guidance and counseling activities. The technical eclecticism embraced by the "multimodal evolution" is concerned with efficient and effective practice at all levels through the use of the BASIC ID, or a related heuristic device, to guide assessment and intervention.

Smith and Southern (1979) adapted the BASIC ID to fit the needs of career counseling. Their multimodal career counseling model represented an application of Lazarus' (1976) assessment scheme within a systematic intervention strategy. Multimodal career counseling involves the following stages: (1) establishing the relationship; (2) screening the modalities (multimodal assessment); (3) intervening with specific, targeted modalities; (4) assigning homework and "tryout" experiences (systematic behavioral assignments and self-management training); and (5) following-up effects of counseling. The follow-up is a major stage because post-treatment multimodal assessment may indicate needs for "recycling" through earlier stages or novel problem areas.

Another adaptation of the BASIC ID directly addressed concerns in career education. Gerler's (1977) exciting approach integrated aspects of career counseling, behavior therapy, psychological education, and career development. The underlying concern of the approach is the design of career education programs by addressing each of the BASIC ID modalities.

These programs should deal with" (a) career-related behaviors such as interviewing for jobs and information seeking, (b) the

> role of affect in decision making, (c) the painful and pleasurable sensations associated with work, (d) the role of mental imagery in vocational development, including the part imagery plays in one's ability to relax during vocational crises, (e) the importance of cognition in vocational development, including the attitudes, values, and beliefs that affect career decision making, (f) the effect of interpersonal relations on an individual's ability to find and maintain employment, and (g) the effect of alcohol and other drugs on career development (Gerler, 1977, p. 239).

According to this approach, various training and learning experiences--drawn primarily from existing resources--would be incorporated into career education programs in order to address each of the seven modalities. While Gerler's (1977) method is comprehensive, it is not necessarily "systematic" in the sense that individual career development concerns are addressed according to unique priorities.

The BEST IDEA in Career Education

The "BEST IDEA" acronym refers to an expansion of the multimodal career education approach to insure that programs address individual career development needs. Although the labels of the areas have been modified, the BEST IDEA incorporates Lazarus' seven modalities, as well as other factors, within its boundary. The modalities are conceived as primary factors, environmental setting events and referent conditions, and secondary factors, or individual responses. Primary factors must receive initial attention in individualized career development activities because these factors influence the frequencies and strengths of secondary

variables. Secondary factors must be considered when the potential confounding of the setting events and referent conditions has been eliminated. Work with primary factors may be effective enough to reduce or suppress individual career problems expressed at the secondary level of assessment. Emphasis upon the primary factors is also cost effective because career development activities can be conducted in groups. The factors in the BEST IDEA are presented in Table 1.

Insert Table 1 about here

The correspondence between Lazarus' (1976) model and multimodal career education (i.e., the BEST IDEA) is great. "Behavior" and "Interpersonal Relationships" factors are the same in both approaches. The "Emotion" factors represent a combination of "Affect" and "Sensation" from multimodal behavior therapy. "Self-Talk" is a delimitation of Lazarus' "Cognition," while "Thought" stresses the so-called "mental" aspects of the "Imagery" modality. Collectively, "Affect," "Self-Talk," and "Thought" constitute a class of covert behaviors. "Behavior" represents the overt responses or operants.

The primary factors within multimodal career education account for the extensive influences of situations upon individual overt and covert behavior. Inclusion of primary factors in the BEST IDEA renders the model "complete" with respect to conditioning theory and somewhat more resistant to the criticisms directed at multimodal behavior therapy (e.g., Wilkins & Thorpe, 1978). "Developmental Level" and "Alpha Factors" are setting events in that such influences as learning disability (developmental level) and alcoholism (alpha factor) establish the limits of the

secondary factors and affect the contingencies which maintain or suppress overt and covert behaviors. "Developmental Level" and "Economic and Societal Factors" have no parallels in multimodal behavior therapy.

Developmental Research and Utilization

One strength of the BEST IDEA is its scope as an assessment tool. However, the multimodal approach is not simply a framework for organizing case notes, a claim made by Wachowiak (1978). Rather, multimodal career education incorporates assessment rules that direct career development activities in a stepwise fashion (Southern, Topper, Raley, & Walton, 1981). Generally, the rules include assessment of primary factors, then secondary factors, beginning with the least complex, most objectively measured modality, and progressing through the more difficulty, time-consuming modalities to measure. Initial work in assessing the factors involved a brief questionnaire or a structured interview protocol (Smith & Southern, 1979; Southern & Smith, 1982). Using the Developmental Research & Utilization model, an assessment system was created for use with nursing students. The system included a Career Development Questionnaire (CDQ), suggested by Lazarus' Life History Questionnaire, and some supporting psychometric instruments: Vocational Preference Inventory, Rathus Assertiveness Scale, Bem Sex Role Inventory, Sixteen Personality Factor Test, Attitudes Toward Women Scale, Work and Family Orientation Scale, and a Nursing Self-Talk Log, a behavioral assessment. Uses of the assessment system in program design and outcome evaluation of a trial multimodal career education curriculum are described in a final project report available from the Texas Education Agency[1] (Southern et al., 1981).

The Developmental Research & Utilization model proved to be a useful guide to curriculum development, as well. The model emerged from the planned change and educational innovation work of Guba and Clark (1965). Thomas (Note 1) created the model for the purpose of innovating social technology for large system change efforts. The nature and logic of the model make it quite appropriate for use in remediating the nurse shortage problem, which is a function of a complex social system. Developmental Research and Utilization also complemented the systems approach to occupational curriculum development, described by Bailey and Stadt (1973). The model is described in Table 2.

Insert Table 2 about here

Activities within the Analysis Phase of Developmental Research included problem specification, consultation with guidance and assessment specialists, collaboration with an advisory panel (composed of professional nurses who possessed expertise in the areas of nursing education and nurse employment), and identification of career education as a viable approach to the shortage. During the Development Phase, advisory panel members and consultants guided the selection of relevant literature within the nursing, curriculum development, assessment, career education, and personnel and guidance domains. Operations within this critical phase included innovation and production of the multimodal career assessment package, construction of a course outline and a training plan within which to conduct trial uses of career development activities, and development of some individual and group activities that seemed

to address the needs identified by the consulting specialists and by program review and visitation. A formal statement of the problem, with recommendations for remediating the nurse shortage and designing curricula, was realized in the completion of a position paper, which was based upon material and commentary provided by advisory committee (see Southern, Note 5). The development operations enabled pilot implementation of the assessment system and the multimodal career development activities.

During the Fall 1980 semester at Odessa College (Texas), data were gathered through trial use of the Career Development Questionnaire and supporting instruments in academic advisement and an applied psychology course called "Personal Development for Nursing Students." Individual and group career development activities were selected according to the identified needs and pilot tested within the aforementioned coures. The assessment procedures and activities that produced the best results were then incorporated into an instructional resource guide, "Multimodal Career Education for Nursing Students," by means of a formative evaluation strategy (Southern et al., 1981). The resource guide directed a quasi-experimental trial of the multimodal career education curriculum.

The two-semester hour applied psychology course was adapted to offer an entire unit of multimodal career education to seventeen freshman students entering the career ladder nursing program in the Spring 1981. The assessments and activities are described in Table 3.

Insert Table 3 about here

In Table 3, the instructional components, numbers of sessions (from the fifteen-week semester), goals, and modalities addressed by the activities, are depicted. Since three class meetings were used to collect data,

twelve two-hour meetings were actually devoted to BEST IDEA activities. Most of the components were presented to the entire class, due to the shared concerns and needs of the group; however, some activities were conducted in smaller homogeneous groups or as individual exercises within the class. Most individual interventions were offered as homework assignments.

Due to the small sample size of course completers (nine of the initial seventeen students), great variability in some scores, other confounding variables, and inherent weaknesses of the evaluative design (see Southern et al., 1981), the results of the quasi-experimental trial must be interpreted cautiously. The high attrition rate was interpreted as an indicator that some students changed perceptions about careers in nursing because they withdrew from the required course, which was implemented with the same demands as in previous semesters. Although the attrition cannot be attributed to exposure to the new personal and environmental information, which constituted the multimodal career education, data gathered at pre-treatment assessment suggested some differences between attrition group members and program completers. Persons in the attrition group scored higher on the Conventional Scale and lower on the Intellectual Scale of the Vocational Preference Inventory than persons who completed the course. Attrition group members also scored lower on the Rathus Assertiveness Scale, a measure of assertive and action oriented behavior. The average age of course completers was 28.75 (Range-20-44), while the mean for the attrition group was 24.00 (Range-20-30). Two of the students were Mexican-American (both completing the course) and two were males (both withdrew from the course by the end of the semester).

Intensive data analyses by individual students are contained in the final report (Southern et al., 1981).

During the trial, there was movement toward the nursing occupational code (SA/I) on the Vocational Preference Inventory (VPI). In addition, increases in Masculinity and Status Scale scores and decreases in some high Infrequency and Acquiescence Scale scores indicated greater personal and vocational adjustment after exposure to multimodal career education. Program completers demonstrated gains in assertiveness as measured by the Rathus Assertiveness Scale and Factor E of the Sixteen Personality Factor Test (16PF). Changes in scores on the Bem Sex-Role Inventory confirmed shifts toward greater action-orientation and sex role flexibility. Gains in Attitudes Toward Women Scale scores indicated readiness to explore nontraditional roles and values. On the Work and Family Orientation questionnaire, increases in Mastery and decreases in Personal Unconcern scores showed heightened career commitment and diminished "fear of success" respectively. Unexpected decreases in Work and Competitiveness reflected less interest in hard work and competition among some of the nursing students. Changes in scores on the 16PF produced mixed results. There were beneficial shifts toward greater assertiveness (Factor E), enthusiasm (Factor F), astute behavior (Factor N), and self-assurance (Factor O). There was a dramatic gain in self-sufficiency (Factor Q2), but this result must be qualified in terms of some observed tendencies toward expediency (Factor G) and radicalism (Factor Q1). Data gathered by means of Nursing Self-Talk Logs reflected movement toward commitment to nursing as a career. Over the course of the trial, frequencies of "self-talk away from nursing" consistently decreased.

The results from the trial suggested that multimodal career education can produce good outcomes among nursing students. Gains in assertiveness, sex role flexibility, personal adjustment, and career commitment, are desirable among nursing students and recent graduates, according to the literature on nursing job satisfaction and career development. The preliminary evaluation of the "Multimodal Career Education for Nursing Students" curriculum indicated that the BEST IDEA has sufficient merit to warrant additional (more rigorous) investigation.

In terms of the DRU model, the project progressed to the Evaluation Phase of Developmental Research. Data secured from pilot and trial implementations have suggested directions for research and program evaluations. A proposal for a larger-scale, funded research project is being pursued. Given the promising early results and the broad utility of multimodal career education, Utilization Phase activities were initiated. Several reports and articles (Southern, Note 5; Southern et al., 1981; Southern & Smith, 1982) and a professional paper at the 1981 APGA convention (Southern, Note 6) were offered to facilitate diffusion of the BEST IDEA. Multimodal career education has not been adopted or institutionalized to date.

Multimodal Interventions

The BEST IDEA suggests a number of individual activities and group exercises that could contribute to any career development program. Interventions designed to address primary factors require timely implementation and significant involvement of resource persons. When an alpha factor, such as alcoholism or substance abuse, is identified as an impediment to career development, the individual should be referred immediately

to a professional helper. Frequently, in business and industry, treatment for substance abuse presents the interface between career, health, and safety components of the Human Resource Development program. Individual treatments for significant illness and psychopathology, insomnia, and stress-related lifestyle disorders are examples of other alpha interventions.

Individual needs associated with Developmental Level should also receive immediate attention. Students with serious developmental problems, such as learning disabilities or impoverished educational background, need not be referred exclusively to remedial programs. Rather, multimodal career education activities can be adapted so that they are accessible to all. This modality specifically addresses the concerns of handicapped and special needs populations by removing barriers to career development and building upon individual strengths. Developmental Level interventions often include modification of instructional resource materials to deal with cognitive organization and age-appropriate behavior.

Interventions that are matched with Economic and Societal Factors are less concerned with altering the stimulus properties of other career development activities (e.g., modifying resource materials) and more concerned with providing psychological education and career information about the world of work. Socioeconomic influences upon career choice, effects of various environmental motivations (money, prestiage, etc.), interactions of labor market demand and supply of workers, and ethnic/cultural pride can be presented in group or individual sessions.

Interventions with Interpersonal Relations are among the activities most easily managed by the instructor. These interventions concentrate

upon structured group experiences, social skills training (Bellack & Hersen, 1979), and assertiveness training (Lange & Jakubowski, 1976). The goals of activities that typically involve organized groups of students are increasing collaborative conflict resolution, human relations and communication skills, and effective problem-solving. Many of the activities address individual needs to overcome anxiety and self-preoccupation, fear of social situations, lack of assertiveness, and performance deficits. Social skills training and behavioral counseling interventions focus upon building interpersonal behaviors for a variety of settings and situations, including speaking over the telephone, asking questions in class, and addressing an employer regarding a grievance. The BEST IDEA for nursing students emphasized appropriate and responsible assertion within the complex social system of the hospital.

Secondary interventions, by their very nature, are very individualized, reflecting the combined influences of the primary factors for the unique person. Behavioral interventions are the most concrete and immediate since they attempt to modify the overt surfeits and deficits, which interfere with the individual's career development. Behavioral counseling (e.g., Krumboltz & Thoresen, 1976) presents the major means for implementing behavior change. In order to program for generalization and maintenance of behavior change, behavioral self-management (Thoresen & Mahoney, 1974; Watson & Tharp, 1977) and systematic behavioral assignment (Shelton & Ackerman, 1976) should be applied whenever feasible.

Interventions with Self-Talk can be as rigorous as activities concerned with modifying overt behaviors. Self-Talk interventions include rational restructuring (Goldfried & Davison, 1976), self-instruc-

tion training (Meichenbaum, 1977), problem-solving training (D'Zurilla & Goldfried, 1971), and stress inoculation training (Meichenbaum, 1973). The techniques are concerned with the modification of internal statements--also called "attitudes," "evaluative beliefs," and "values"--which may be particularly problematic for women in American society due to years of sex bias and sex role stereotyping.

If the images and daydreams that constitute the Thought factor have been specified clearly, then effective interventions are possible. Visuomotor behavioral rehearsal (Suinn, 1975) and guided imagery (Crabbs, 1979; Kelly, 1974) are two important strategies. Interventions with Emotion usually will not be learner-or instructor-managed, at least initially. Skilled mental health practitioners should conduct the treatment procedures required to ameliorate emotional behaviors, including systematic desensitization (Wolpe, 1973) and anxiety management training (Suinn, 1977).

Summary

Multimodal career education, the BEST IDEA, was proposed as an approach to the problem of retaining skilled nurses in the workforce. Multimodal assessment and intervention strategies were derived from the multimodal behavior therapy of Arnold Lazarus (1973, 1976) and applications of his BASIC ID in career counseling (Smith & Southern, 1979) and career education (Gerler, 1977). Multimodal career education for nursing students was implemented as an applied occupational research project (Southern et al., 1981) guided by a comprehensive Developmental Research and Utilization (Thomas, Note 1) procedure. The results of a trial of the BEST IDEA suggested applications of the approach with nursing students, as well as, other individuals who present complex career development needs.

Footnote

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Table 1

"BEST IDEA" in Career Education

Acronym	Factor	Description
B	Behavior	Observable actions or responses
E	Emotion	Covert behaviors or physiological arousal
S	Self-Talk	Internal speech
T	Thought	Images or fantasies
I	Interpersonal Relationships	Interactions with one or more persons
D	Developmental Level	Age-appropriate & special learning needs
E	Economic & Societal Factors	Cultural or socio-economic influences
A	Alpha Factors	Significant physiological settings factors such as drugs

Table 2

Developmental Research and Utilization Model

Developmental Research Phase	Concerns	Operations	Activities	General Curriculum Phase (Bailey & Staut, 1975)
I. Analysis	A. Problematic Human Condition	1. Problem Statement	Problem analysis and identification "state of the art" review	Selection of a curricular language, formation of goals and objectives
	B. Basic Information Source	2. Information Selection	Selection of most relevant source, such as basic or applied research, scientific technology, practice experience	
II. Development	C. Relevant Data	3. Information Gathering and Assessment	Literature review, site visits, consultation	Preparation of instructional products
	D. Product Design	4. Product Innovation	Novel assembly, novel application, invention, selection of curricular language	
	E. New Product	5. Product Realization	Construction of prototype, written statement of practice procedure	
III. Evaluation	F. Trial and Field Implementation	6. Trial Use	Pilot implementation, demonstration project, evaluation study	Experimental tryout, evaluation and quality control
		7. Data Collection	Collection of outcome data by means of field experimentation, field study, evaluative research	

(Continued)

Table 2 (Continued)

Developmental Research and Utilization Model

Developmental Research Phase	Concerns	Operations	Activities	General Curriculum Phase (Baily & Stadt, 1975)
	G. Outcomes of Use	8. Product Evaluation	Research evaluation, program evaluation, cost-benefit analysis	
IV. Diffusion	H. Diffusion Media	9. Diffusion Media Preparation	Preparation of articles, books, and training media	Diffusion
		10. Product Information Dissemination	Publication, training, professional education, field demonstration workshop	
V. Adoption	I. Broad Use	11. Implementation by Users	Use by practitioners, program change and administrative follow through	Adoption
		12. Product Institutionalization		

Note: Evaluation often leads to product revision with subsequent testing and evaluation prior to Diffusion and Adoption.

Table 3

Multimodal Career Education Components

Component	Sessions	Goals
Assessment[a]	2	To secure pre-test data for the research project
Study Skills Training	2	To present instructional activities designed to improve skills in note-taking, studying, and test taking.
Multimodal[b] Career Education	1	To present an overview of the multimodal career development model, practice in reviewing cases with the approach, and the assignment of completing the CDQ
Sex Stereotyping	1	To present a program exploring the nature and extent of sex bias and sex role stereotyping
Assertiveness Training	3	To present an overview of assertion in nursing, practice in applying assertive behaviors in role-play situations, and some assignments to generalize the skills to natural environments
Problem Solving and Dec Decision Making	1	To present behavioral methods for self-managing change
Stress Management	1	To present an overview of stress and coping and practice in using stress management/tension reduction techniques
Career Planning[c]	2	To present opportunities for role-modeling in career development and understanding career from the social learning perspective

(Continued)

Table 3 (Continued)

Component	Sessions	Goals
Educational Planning	1	To present information related to continuing education, career ladders, and nursing education
Assessment[d]	1	To secure post-test data for the research project and to conduct debriefing sessions.

[a]The two sessions were used only for data acquisition for the project. In the ideal implementation of multimodal career education the data could be used for "individualizing" instruction and designing career development plans.

[b]The multimodal career education model was presented in class, three case studies were made, and the CDQ was assigned as an individual (homework) exercise. In an actual application of the curricula, the CDQ would be administered at the outset in order to determine instructional needs.

[c]Two guest speakers acted as role models and provided useful career information as well. The social learning model of career (see Mitchell, Jones, & Krumboltz, 1979) was presented to show the linkages between career exploration, decision-making, education, job acquisition, job maintenance, and career advancement. Students were asked to interview a professional in nursing as a homework assignment or individual exercise.

[d]Additional meetings with students were conducted after the close of the semester to recover data and debrief interested individuals.